

In the Claims:

1-24. Cancelled.

25. (Currently amended) An enriched cell population wherein at least greater than 1% of the cells are mesenchymal precursor cells that are capable of giving rise to colony forming units-fibroblast (CFU-F).

26. (Currently amended) An enriched cell population as in claim 25 wherein the at least greater than 1% of cells carry at least two markers selected from the group of surface markers specific for mesenchymal precursor cells consisting of LFA-3, THY-1, antigen identified by STRO-1, VCAM-1, ICAM-1, PECAM-1, P-selectin, L-selectin, CD49b/CD29, CD49c/CD29, CD49d/CD29, CD29 (integrin beta), CD18, CD61, 6-19, thrombomodulin, CD10, CD13, integrin beta, STRO-2, CD146, and SCF or any combination thereof.

27. (Currently amended) An enriched cell population as in claim 26 wherein the at least greater than 1% of cells carry the antigen identified by markers STRO-1 and VCAM-1.

28. (Currently amended) An enriched cell population as in claim 25 wherein at least 5% of the cells are mesenchymal precursor cells capable of giving rise to colony forming units-fibroblast (CFU-F).

Claims 29 and 30 (Cancelled).

31. (Currently amended) An enriched cell population as in claim 25 wherein at least 10% of the cells are mesenchymal precursor cells capable of giving rise to colony forming units-fibroblast (CFU-F).

Claims 32 and 33 (Cancelled).

34. (Currently amended) An enriched cell population as in claim 25 wherein at least 40% of the cells are mesenchymal precursor cells capable of giving rise to colony forming units-fibroblast (CFU-F).

Claims 35 to 39 (Cancelled).

40. (Previously presented) An enriched population of cells as in claim 25 wherein a proportion of the cells are capable of differentiation into at least two committed cell types selected from the group including adipose, areolar, osseous, cartilaginous, elastic and fibrous connective tissue.

41. (Previously presented) An enriched population of cells as in claim 25 wherein the enriched population is suitable for seeding onto a vehicle for implantation to assist in bone growth.

42. (Previously presented) An enriched population of cells as in claim 25 wherein the enriched population has an exogenous nucleic acid transformed in to it so that the population may be introduced into the body of a patient to treat a disease or condition.

43. (Previously presented) An enriched population of cells as in claim 25 wherein the enriched population has an exogenous nucleic acid that expresses a therapeutic agent transformed in to it so that the population may be introduced into the body of a patient to release the therapeutic agent.

44. (Previously presented) An enriched population of cells as in claim 25 wherein the enriched population is used to augment bone marrow transplantation.

45. (Original) A composition including the enriched population of claim 25.

46 (Cancelled).

47. (Previously presented) A composition as in claim 45 wherein the composition is preadsorbed onto ceramic vehicles that are precoated with fibronectin and are suitable for implantation to augment bone marrow transplantation.

48. (Previously presented) A composition as in claim 45 wherein the composition is suitable for use in augmenting bone marrow transplantation.

49. (Original) A composition as in claim 48 wherein the composition also includes haemopoietic cells.

50. (Previously presented) A composition as in claim 45 wherein the population has an exogenous nucleic acid transformed in to it so that the composition may be introduced into the body of a patient to treat a disease or condition.

51. (Previously presented) A composition as in claim 45 wherein the population has an exogenous nucleic acid that expresses a therapeutic agent transformed in to it so that the composition may be introduced into the body of a patient to release the therapeutic agent.

52. (Currently amended) An enriched cell population as in claim 25 wherein the ~~at least greater than 1%~~ of cells are mesenchymal precursor cells that are positive for one or more markers selected from the group consisting of STRO-1^{bright}, VCAM-1^{bright}, THY-1^{bright}, CD146^{bright} and STRO-2^{bright}.

53. (Currently amended) An enriched cell population as in claim 52 wherein the STRO-1^{bright} cells carry a high copy number of ~~an antigen identified by~~ STRO-1.

54. (Currently amended) An enriched cell population as in claim 52 wherein the VCAM-1^{bright} cells carry a high copy number of ~~an antigen identified by~~ VCAM-1.

55. (Currently amended) An enriched cell population as in claim 52 wherein the THY-1^{bright} cells carry a high copy number of ~~an antigen identified by~~ THY-1.

56. (Currently amended) An enriched cell population as in claim 52 wherein the CD146^{bright} cells carry a high copy number of ~~an antigen identified by~~ CD146.

57. (Currently amended) An enriched cell population as in claim 52 wherein the STRO-2^{bright} cells carry a high copy number of ~~an antigen identified by~~ STRO-2.

58. (Currently amended) An enriched cell population as in claim ~~25~~ 53 wherein the STRO-1^{bright} cells are negative for at least one marker selected from the group consisting of CBFA-1, collagen type II, PPAR γ 2, and glycophorin A.